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EXAMINER

COLBERT, ELLA

ART UNIT	PAPER NUMBER
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3694

DATE MAILED: 10/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

09/161,401

Applicant(s)

SUGIYAMA, MITSUMASA

Examiner

Ella Colbert

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8,10-12,14-19 and 21-34 is/are pending in the application.
- 4a) Of the above claim(s) 7,8,13,18,19,24,25,27,28 and 30-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,12,15-17,23,26 and 29 is/are rejected.
- 7) ☒ Claim(s) 3 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/21/05, 3/01/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1, 3-8, 10-12, 14-19, and 21-34 are pending. Group I, claims 1, 3-6, 12, 14-17, 23, 26, and 29 have been elected with traverse in response to the Election/Restriction filed 12/15/04.
2. The IDS filed 01/21/06 and 3/01/05 have been reviewed.

Response to Arguments With Traverse

3. Applicants' election with traverse of Group I, claims 1, 3-6, 12, 14-18, 23, 26, and 29 in the reply filed on 12/15/04 is acknowledged. The traversal is on the ground(s) that (1) Applicants' respectfully submit that the claims of Groups I to IV are all generally directed to operations for a distributed database system and since all claims are generally directed to a same technical field, Applicants' respectfully submit that two-way distinctness is not seen to be present among the claims of Groups I to IV. MPEP 806.05 (c); (2) Applicants' submits that the search and examination of all pending claims of Groups I to IV can be made without serious burden, and therefore restriction is believed to be improper. MPE 803; and Applicants' respectfully submit that concurrent search and examination of all claims of Groups I to IV can be made without serious burden.

This is not found persuasive because (1) Group I, claims 1, 3-6, 12, 14-18, 23, 26, and 29 are directed to accessing databases, Group II, claims 7, 24, 25, 27, and 30 are directed to backing up a database, Group III, claims 8, 10, 11, 19, 21, 22, 28, and 31 are directed to conversion information, and Group IV, claims 32-34 are directed to extracting an attribute item from a document and an extraction step which is not present

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in the other independent claims. Independent claims 1, 12, 18, 23, 26, and 29 has copying data , determining if each of the attribute items of attribute information appended to the data corresponds, and copying content data; Group II, claims 7, 24, 27, and 30 are directed to a backup database which is not present in the other independent claims in Groups I, III, and IV; Group III, claims 8, 19, 28, and 31 are directed to conversion information which is not present in the other independent claims in Groups I, II, and IV; and Group IV, claim 32, 33, and 34 are directed to extracting an item attribute which is not found in the other independent claims in Group I, II, and III.

Therefore each independent group of claims has divergent subject matter requiring a different search on that subject matter. A restriction because of the number of claims does not need to be present for a restriction to be given. Claims can have divergent subject matter requiring a different search for each grouping of claims though they may be in the same class and subclass. However, Applicant's claims are in the same class but different subclasses because of their "divergent" subject matter.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

4. Claims 1, 4, 5, 6, 12, 15, and 16 are objected to because of the following informalities: claim 1, line 16 reads "determination means that the attribute item does not corresponds to any of the attribute items of". This line would be better read as "determination means that the attribute item does not correspond to any of the attribute items of". Claim 4, line 2 reads "predetermined format indicates an attribute item name and contents" This line would be better read as "predetermined format indicates an

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attribute item name and content.” Claims 5, 15, and 16 have a similar problem. Claim 12, line 6 reads “information appended to the data corresponds to each of attribute items of the second database;”. This line would be better read as “information appended to the data corresponds to each of the attribute items of the second database;”. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1, 12, 17, and 26 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Claim 1 has steps missing which are considered critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Claim 1 recites “first copying means ... from a first database ...; (step missing); ...; second copying means for copying content data ...; and” (step missing). The steps that are missing are another step with “first copying”, “second copying”, and “first database”. “First copying”, “second copying”, and “first database” are in the claim limitations once and nothing appears to be done with them after the first time they are recited in the claim limitations.

Claims 12, 17, and 26 are in improper method claim format.

For example, claim 12 to be in the proper format should be as follows: “An information processing method ..., the method comprising the steps of:

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Copying, in a first copying step, ...; determining in a first determination step if each ...; and copying in a second copying step content data ...". Claims 17 and 26 should be similar with the omitted steps added.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. The claimed invention is directed to non-statutory subject matter. Claim 29 recites "code" which is software and per se not considered to be patentable subject matter. The code needs to be embodied on a computer- readable medium executing computer program instructions to be considered statutory.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 3-6, 12, 14-18, 23, 26, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al (US 5,842,222), hereafter Lin in view of Woodhill et al (US 5,649,196), hereafter Woodhill.

With respect to claims 1, 12, 23, and 26, Lin teaches, a first copying means for copying data selected from a first database to a second database (col. 2, lines 3-14); and a determination means for determining if the attribute items of attribute information

appended to the data corresponds to each of the attribute items of the second database (col. 3, lines 33-43).

Lin failed to teach, a second copying means for copying information of an attribute item as content data of a corresponding attribute item of the second database if it is determined by said determination means that the attribute item corresponds to one of the attribute items of the second database, and for copying content data of an attribute item and item information indicating the attribute item as content data of a predetermined attribute item of the second database if it is determined by said determination means that the attribute item does not correspond to any of the attribute items of the second database

Woodhill teaches, a second copying means for copying information of an attribute item as content data of a corresponding attribute item of the second database if it is determined by said determination means that the attribute item corresponds to one of the attribute items of the second database, and for copying content data of an attribute item and item information indicating the attribute item as content data of a predetermined attribute item of the second database if it is determined by said determination means that the attribute item does not correspond to any of the attribute items of the second database (col. 2, lines 20-38, col. 9, lines 49-67 and col. 10, lines 1-13). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a second copying means for copying information of an attribute item as content data of a corresponding attribute item of the second database if it is determined by said determination means that the attribute item corresponds to one of the attribute items of the second database, and for copying content data of an attribute item and item information indicating the attribute item as content data of a predetermined attribute item of the second database if it is determined by said

determination means that the attribute item does not correspond to any of the attribute items of the second database and to modify in Lin because such a modification would allow Lin to have a backup/restore system that is capable of operating on a networked computer system and capable of accommodating a large array of storage devices with the attribute item represented as regular data, attribute data, or a control list of data in a database.

With respect to claims 4 and 15, Lin failed to teach, the predetermined format indicates an attribute item name and contents. Woodhill teaches, the predetermined format indicates an attribute item name and contents (col. 3, lines 52-63 & fig. 3, steps 40, 44, 48, 50, 52, 54, & 57). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the predetermined format indicate an attribute item name and contents and to modify in Lin because such a modification would allow Lin to have a file identification (contents), a record type, a file location, a file name (attribute item).

With respect to claim 5, Lin failed to teach, ... the second copying means detects attribute information stored in the predetermined attribute item in a predetermined format recovering the attribute information on the basis of the attribute item name and contents indicated by the information. Woodhill discloses, ... the second copying means detects attribute information stored in the predetermined attribute item in a predetermined format recovering the attribute information on the basis of the attribute item name and contents indicated by the information (col. 9, lines 36-67 and col. 10, lines 1-12). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have ... the second copying means detect attribute information stored in the predetermined attribute item in a predetermined format recovering the attribute information on the basis of the attribute item name and contents

indicated by the information and to modify in Lin because such a modification would allow Lin to have at least one copy of the contents that is stored and if a disaster should destroy and entire site not all of the copies of the site's data would be destroyed.

With respect to claims 6 and 17, Lin teaches, ... holding conversion information indicating a correspondence between attribute items of the first and second databases and the determination means determines based on the conversion information indicating a correspondence between attribute items of the first and second databases (col. 1, lines 58-67 and col. 2, lines 1-14) and wherein the determination means determines based on the conversion information if each of the attribute items of the attribute information appended to the data corresponds to each of the attribute items of the second database (col. 2, lines 53-66).

With respect to claim 18, Lin teaches, the first copying means for copying data selected from a first database to a second database (col. 3, lines 14-25); ... determining if the attribute items of attribute information appended to the data can be set into the second database (col. 3, lines 34-43); and information recovery means for when attribute information stored in the predetermined attribute item in the predetermined format is detected upon copying data from the backup database to one of the plurality of databases, recovering the attribute information on the basis of an attribute item name and contents thereof indicated by the information (col. 2, lines 34-52). Lin failed to teach, ... copying information of an attribute item determined by the determination step to not correspond to any of the items in a second database to a predetermined attribute item of the second database. Woodhill teaches, ... copying information of an attribute item determined by the determination step to not correspond to any of the items in a second database to a predetermined attribute item of the second database (col. 2, lines 20-38 and col. 9, lines 49-67 and col. 10, lines 1-13. It would have been obvious to one

having ordinary skill in the art at the time the invention was made to have ... copying information of an attribute item determined by the determination step to not correspond to any of the items in a second database to a predetermined attribute item of the second database and to modify in Lin because such a modification in Lin would allow the information to be converted from the first database to the second database and each first database or primary database to have a corresponding mirror database for backup or archiving and recovering information when a computer system failure occurs.

With respect to claim 16, Lin failed to teach, recovering the attribute information based on the attribute of the item name and contents indicated by the attribute information when the attribute information is stored in the predetermined attribute item in a predetermined format is detected in the second copying step. Woodhill teaches, recovering the attribute information based on the attribute of the item name and contents indicated by the attribute information when the attribute information is stored in the predetermined attribute item in a predetermined format is detected in the second copying step (col. 10, lines 21-44). It would have been obvious to one having ordinary skill in the art at the time the invention was made to recover the attribute information based on the attribute of the item name and contents indicated by the attribute information when the attribute information is stored in the predetermined attribute item in a predetermined format is detected in the second copying step and to modify in Lin because such a modification would allow Lin to have the backup copy maintained in the storage file for ultimate storage to magnetic tape or other low cost storage media.

With respect to claim 29, Lin and Woodhill did not teach a control program comprising a code for performing the steps of claims 1, 7, and 8 as recited in claims 29-31, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a control program comprising a code because the central

processing unit (CPU) performs the functions of reading and executing the program codes and a storage medium such as a CD ROM, a hard disk, a floppy disk, optical disk, and magnetic tape provides the program codes.

Allowable Subject Matter

11. Claims 3 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: "the second copying means copies the information of the attribute item which does not correspond to any of the attribute items of the second database to the predetermined item in a predetermined format which indicates information of a mismatching attribute item."

Applicant is reminded that when incorporating allowable subject matter into a claim, the allowable subject matter must be worded exactly as stated in the reasons for allowance.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure..

Boothby et al (US 6,330,568) disclosed the synchronization of databases.

McCargar (US 6,014,674) disclosed performing updates and log changes.

Inquiries


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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ella Colbert whose telephone number is 571-272-6741. The examiner can normally be reached on Monday, Tuesday, and Thursday, 5:30AM-3:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on 571-272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

October 16, 2006


ELLA COLBERT
PRIMARY EXAMINER